## Abstract of the Disclosure

A lithium secondary battery includes an electrode unit produced by winding or laminating a positive electrode and a negative electrode via a separator, and a non-aqueous electrolytic solution containing a lithium compound as an electrolyte. The cumulative concentration of water (H<sub>2</sub>O) released from both of the positive electrode and the negative electrode is suppressed to 5,000 ppm or lower in relation to the weight of the electrode unit, exclusive of current collectors, in the case where both electrode plates are heated at 25 to 200°C and/or 1,500 ppm or lower in the case where both electrode plates are heated at 200 to 300°C. The lithium secondary battery can have high charging and discharging efficiency, excellent cycle property and reliability by suppressing deterioration of battery properties.